BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Construction of Concrete Retaining Wall And Other Civil Works to Mallasandra Colony School In Ward No 13 Shettyhalli Sub Division

Pre measurement record on :-

Sl No	Description of work	No	Dimensions L	B	D	Quantity	Unit
1	Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification.						
	Earth work for Column Foundation	4	1.80	1.80	1.60	20.74	
	For SSm Foundation	1	2.30	0.60	0.60	0.83	
	water line	1	25.00	0.40	0.40	4.00	
						25.56	Cum
					Qty limited to	**24.53**	Cum

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Shettyhalli Sub Division

Continued.....

2	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms^thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.						
	Column Foundation	4	1.80	1.80	0.15	1.94	
	For SSm Foundation	1	2.30	0.60	0.15	0.21	
	Pavement area	1	31.75	2.30+4.80/2	0.15	16.91	
	Pavement area	1	(15.20+10.20)/2	(12.80+4.80)/2	0.15	16.76	
	Pavement Flagging	1	14.50	1.80	0.15	3.92	
	At column arround	4	1.80	1.80	0.15	1.94	
						41.68	Cum
					Qty limited to	**40.08**	

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Continued.....

3	Providing and constructing granite I trap / basalt size stone masonry in foundation with cement mortar & stone hammerd dressed in courses not less than 20 cms high, bond stones at 2m. apart in each course including cost of materials, labour, HOM, curing complete as per specifications.						
	Compound	1	2.30	0.45	0.40	0.41	
						0.41	Cum

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Continued.....

	Providing and constructing granite /trap/ baslat size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications						
		1	2.30	0.40	0.20	0.18	
						0.18	Cum

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Continued.....

6	Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs. with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications						
	Column Footing						
	Column	4	1.80	1.80	0.60	7.78	
		4	0.45	0.45	0.60	0.49	
						8.26	Cum
					Qty limited to	7.42	Cum

Assistant Engineer
Ward No 13

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Shettyhalli Sub Division

Continued.....

7	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications.						
	Column Footing						
	Column	4x4	1.80		0.60	17.28	
		4x4	0.45		0.60	4.32	
						21.60	Sqm

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Shettyhalli Sub Division

Continued.....

8	Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications						
	Column footing Matt bottom 16mm @.125 c/c (1.57kg/mt)	4x15	2.10			197.82	
	Column footing Matt Top 16mm @.125 c/c	4x15	2.10			197.82	
	Chair 12mm	4x8	1.50			42.75	
	Column 8/20mm (2.47kg/m)	4x8	1.90			150.18	
	8 mm Strps @0.20 C/C (0.39kg/mt)	4x7	1.85			20.20	
	plinth 4/12mm (0.89Kg/mt)	4	2.30			8.19	

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	8mm strps @0.20m C/c	12	1.20			5.62	
						622.57	
						0.62	Tonne

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Shettyhalli Sub Division

Continued.....

9	Providing weep holes in Brick masonry / Plain / Reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing foce. Complete as per drawing and Technical Specifications complete as per specifications						
	For retaining	25	0.45			11.25	
		25	0.75			18.75	
						30.00	
					Qty limited to	12.00	Nos/mtr

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Shettyhalli Sub Division

Continued.....

11	Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications.						
	Compound	1	2.50	1.40		3.50	
					Qty limited to	2.40	Sqm

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Ward No 13

Assistante Executive Engineer
Shettyhalli Sub Division

Continued.....

12	Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering: providing and removing scaffolding, including cost of materials labour curing complete as per specifications						
	Compound	2	2.50	1.40		7.00	
					Qty limited to	4.80	Sqm

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Ward No 13

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Shettyhalli Sub Division

Continued.....

13	Fabricating, supplying & erecting M.S. angular Truss for all spans as per approved designs and drawing. The entire truss is anchored suitably by using 4 No's of M.S anchor Bolts at each Supports, with base plate and shoe plate. The work including cutting, straightening, placing in position of M.s Angle and welding wherever necessary, and applying one coat of red oxide primer coat to all the members including cost of all mayterials, labour charges, & hire charges of machineries for cutting, welding, grinding, & erection equipments,						

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	School front						
	R1=172x92x5 (19.94 kg/mt)	4x2	15.900			2536.37	
	R1=172x92x5 (19.94 kg/mt)	1	8.300			165.50	
	R1=172x92x5 verticle member (19.94 kg/m	4x2	0.456			72.74	
	R2=60x60x3.2 (5.7Kg/m) verticle	4x14	0.456			145.56	
	R2=60x60x3.2 (5.7Kg/m) Inclide	4x14	0.670			213.86	
	P1=96x48x3 (6.50kg/mt)	16	22.70			2360.80	
	N B 330x8mm (98.20kg/mt)	4	5.50			2160.40	
	Gusset plate 20mm ,450mmx450mm (157k	4x2	0.45	0.45		254.34	
	Client plate 20mm	4x4	0.50	0.15	0.15	28.26	
	School back side Dinning area						
	R1= 172x92x5.4mm (20.88kg/mt)	5	7.50			783.00	
	R1= 172x92x5.4mm (20.88kg/mt)	1	11.40			238.03	
	R1= 172x92x5.4mm (20.88kg/mt)	1	15.50			323.64	
	R1= 172x92x5.4mm (20.88kg/mt)	1	6.00			125.28	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	7.50			156.60	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	5.70			37.05	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	3.00			19.50	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	6.80			44.20	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	9.50			61.75	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	11.40			74.10	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	12.10			78.65	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	12.60			81.90	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	13.60			88.40	
	P1 Purlin 96x48x3mm, 6.50kg/mt	3	14.60			284.70	
	P1 Purlin 96x48x3mm, 6.50kg/mt	5	30.00			975.00	
	P1 Purlin 96x48x3mm, 6.50kg/mt	5	1.75			56.88	
	P1 Purlin 96x48x3mm, 6.50kg/mt	1	24.75			160.88	
						11527.38	
					Qty Limited to	11265.52	Kg

Assistant Engineer
Ward No 13

Assistante Executive Engineer
Shettyhalli Sub Division

Continued.....

14 PROVIDING TRAPEZOIDAL PROFILED SHEET Providing and installing of pre painted Galvolume iron Trapezoidal profiled sheet of approved make 1060 mm width (1000 mm cover width), 28-30 mm crest height with crest distance of 200 mm c/c with 2 ribs at the centre for stiffening. The total coated thickness (TCT) of the sheet will be 0.47 mm +/- 0.02 mm tolerance Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/A755-550 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling/self tapping screws of 25 mm length, to be fixed over the existing purlins, rafters, channels and trusses.

School front	1	16.15	22.70		366.61	
School back dinning area	1	31.75	6.70		212.73	
School back dinning area	1	(7.5+15.5)/2	(9+16.3)/2		145.48	
side	1	15.50	3.00		46.50	
					771.31	
				Qty limited to	767.80	Sqm

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Ward No 13

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Shettyhalli Sub Division

Continued.....

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15	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M30 with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum)						
	Pavement at dinning area						
	Pavement at dinning area	1	31.75	(4.1+6.5)/2	0.15	25.24	
	Pavement Flagging	1	(15.2+10.2)/2	(6.5+15)/2	0.15	20.47	
	Pavement Flagging	1	14.50	1.80	0.15	3.92	
	At column arround	1	22.50	1.30	0.15	4.39	
		4	1.80	1.80	0.15	1.94	
					Qty limited to	55.96	
						55.76	Cum

Assistant Engineer
Ward No 13
09/06/2020

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Shettyhalli Sub Division

Continued.....

16	Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications with prime						
	Qty same as Item No 12						
						4.80	Sqm

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Ward No 13

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Shettyhalli Sub Division

Continued.....

17	Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surfacebrushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications.					
	R1=172x92	4x2	15.90	0.53		67.42
	R1=172x92	1	8.30	0.53		4.40
	R1=172x92 verticle	4x2	0.456	0.53		1.93
	R2=60x60 verticle	4x14	0.456	0.24		6.13
	R2=60x60 Inclide	4x14	0.67	0.24		9.00
	P1=96x48	16	22.70	0.288		104.60
	N B 330	4	5.50	1.03		22.66
	School back side Dinning area					
	R1= 172x92	5	7,50	0.53		19.88
		1	11.40	0.53		6.04
		1	15.50	0.53		8.22
		1	6.00	0.53		3.18
		1	7.50	0.53		3.98
	P1 Purlin 96x48	1	5.70	0.288		1.64
		1	3.00	0.288		0.86

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	1	6.80	0.288		1.96	
	1	9.50	0.288		2.74	
	1	11.40	0.288		3.28	
	1	12.10	0.288		3.48	
	1	12.60	0.288		3.63	
	1	13.60	0.288		3.92	
	3	14.60	0.288		12.61	
	5	30.00	0.288		43.20	
	5	1.75	0.288		2.52	
	1	24.75	0.288		7.13	
					344.41	
				Qty limited to	**191.64**	Sqm

Assistant Engineer 16/05/2020
Ward No 13

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